# CASS COUNTY HIGHWAY DEPARTMENT BIDDERS PROPOSAL & PLANS

#### **FOR**

## COUNTY PROJECT CH1513 SUBGRADE REPAIR

Various locations on Cass County Highways, in Cass County, North Dakota

Date of Letting: 10:00 A.M., March 19th, 2015

Proposa	al of:			
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#### **COUNTY PROJECT CH1513**

#### **SUBGRADE REPAIR**

Various locations on Cass County Highways,

in Cass County, North Dakota

I hereby certif	y that this	plan, sp	ecification	or repor	t was	prepared	l by me	or	under	my	direct
supervision ar	nd that I ar	n a duly	Registered	d Profess	ional E	Engineer	under t	he l	aws o	f the	State
of North Dako	ta	-	-			-					

<u>Jason P.</u>	Benson	/S/
Jason P.	Benson	
ND Reg.	No. 7490	
Date:	2/27/15	

#### **GOVERNING SPECIFICATIONS:**

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED BY THE NORTH DAKOTA DEPARTMENT OF TRANSPORTATION, OCTOBER 2014; SHALL APPLY, STANDARD DRAWINGS CURRENTLY IN EFFECT; AND OTHER CONTRACT PROVISIONS SUBMITTED HEREIN.

THIS DOCUMENT WAS ORIGNALLY ISSUED AND SEALED BY JASON P. BENSON, ND REG. NO. 7490 ON 2/27/15 AND THE ORIGINAL DOCUMENT IS STORED AT THE CASS COUNTY HIGHWAY DEPARTMENT, WEST FARGO, ND.

#### **COUNTY PROJECT NUMBER CH1513**

#### **SUBGRADE REPAIR**

#### SCOPE OF WORK:

The scope of this project is to incorporate approximately 6% Portland Cement into the subgrade 12" deep and 26' wide, 8 miles long on Cass Highway 32 with an option to do 1 mile on Cass Highway 32 1.5 miles west of State Hwy 18. See the attached Project Location Map. The existing roadbed is graded to 28' wide with approximately 3" of gravel. The final section after stabilization will have a 26' gravel surface top width. The existing 3" gravel will need to be windrowed to allow the stabilization process. Gravel will then be moved to the center 26' section and laid out in a uniform manner at a 4% slope. The final aggregate surfacing is 2" of Class 5 to be placed on the center 26' section.

#### **INSTRUCTIONS TO BIDDERS:**

For the 2015 construction season, Cass County Highway Department will only be accepting bids electronically at BidExpress.com for selected projects. **Project No. CH1513 Subgrade Repair will be bid only electronically.** 

The Cass County Auditor at the Auditor's Office, 211 9th Street South, Fargo, North Dakota, will receive sealed paper bids until 10:00 a.m. on March 19th, 2015. Bids will be opened immediately both electronically and traditionally following the hour set for receiving bids in the Grasslands Room at the Cass County Courthouse, 211 9th Street South, Fargo, North Dakota.

Paper copies of plans and proposal may be obtained at the office of the Cass County Engineer, West Fargo, North Dakota, at \$25.00 per set, non-refundable. Digital copies are available at BidExpress.com free for viewing.

All envelopes containing bids must be clearly marked on the outside "BID FOR SUBGRADE REPAIR", and the current North Dakota Contractors license number must be shown.

A bidder's bond in the amount of 5% of the amount bid, made payable to Cass County shall accompany each bid in a SEPARATE ENVELOPE ATTACHED TO THE OUTSIDE OF THE BID. Certified or Cashier's checks will not be accepted. A copy of the current ND Contractor's License or certificate of renewal shall be included in the Bid Bond envelope. No bid will be read or considered which does not comply with the bond or license requirements.

Prequalification is required for all bidders prior to obtaining a bidder's proposal. Contractors may be required to submit information detailing their ability to perform the work specific to this project. Cass County shall determine the Prequalification status of each contractor requesting a proposal, and reserves the right to deny bid documents to any contractor based on the County's responsibility determination.

The County reserves the right to reject any or all bids, and to waive any irregularities. All bidders must be qualified to bid under the laws of the State of North Dakota.

County Project CH1513 & the C-32 Amenia option will be bid together as one project and the contract will be awarded to the lowest combined bid. Then pending budget constraints the C-32 Amenia option may also be awarded.

# COUNTY PROJECT NUMBER CH1513 SUBGRADE REPAIR

#### **INDEX OF PROVISIONS:**

Price Schedule for Miscellaneous Items Dated October 1, 2014

Special Provision 15-1 Contractor License & Contractor Claims

**Construction Notes** 

**Estimated Quantities** 

**Typical Section** 

**Location Map** 

Construction Sign Layout

Construction Sign List

#### 10/1/2014

### NORTH DAKOTA DEPARTMENT OF TRANSPORTATION PRICE SCHEDULE FOR MISCELLANEOUS ITEMS (PS-1)

The Contractor agrees to accept the following unit prices for each listed item of work and/or material when no project Contract Unit Price exists for that item. Each price listed will be full compensation for the cost of labor, material, and equipment necessary to provide the item of work and/or material, complete in place, including (but not limited to) royalty, disposal of unsuitable material, equipment rental, sales tax, use tax, overhead, profit, and incidentals.

Each listed price is referenced to the Standard Specifications by Section number and Section name.

SECTION NO.	SECTION NAME	ITEM NAME	PRICE PER ITEM
107.08	Haul Roads	Water	\$27 per M Gal.
107.08	Haul Roads	Bitumen for Mix	Invoice Price <sup>1</sup> + 10%
107.08	Haul Roads	Bituminous Mix	\$42 per Ton <sup>2</sup>
107.08	Haul Roads	Aggregate Base	\$17 per Ton <sup>2</sup>
203.01 B	Rock Excavation	Rock Excavation	\$11 per CY
203.01 C	Shale Excavation	Shale Excavation	Common Excavation Bid Price + \$1.00 per CY
203.01 D	Muck Excavation	Muck Excavation	\$9 per CY
203.05 H.3	Embankment	Overhaul	\$1.40 per CY - Mile
260	Silt Fence	Mucking of Silt Fence	\$3.90 per L.F.
260	Silt Fence	Removal of Silt Fence <sup>3</sup>	\$4.25 per L.F.
261	Fiber Rolls	Mucking of Fiber Rolls	\$3.90 per L.F.
261	Fiber Rolls	Removal of Fiber Rolls <sup>3</sup>	\$4.25 per L.F.
420.04 E	Bituminous Seal Coat	Blotter Sand	\$27 per Ton <sup>2</sup>
430.04 G	Hot Mix Asphalt (Excavated Material Hauled to Disposal Area)	Bituminous Mixture	Machine Placed: Bid or Invoice Price + \$31 per Ton Hand Placed: Bid or Invoice Price + \$48 per Ton
704	Temporary Traffic Control	Flagging	\$32 per MHR

<sup>&</sup>lt;sup>1</sup>Price paid for bituminous material will be Invoice Price plus Freight Costs.

<sup>&</sup>lt;sup>2</sup>Price includes haul up to 10 miles. Payment for haul exceeding 10 miles will be according to Section 109.03 E, "Force Account." The haul distance for Aggregate Base and Bituminous Mix will be based on the average haul. The haul distance for Blotter Sand will be from the point where the haul begins to the point where it enters the project.

<sup>&</sup>lt;sup>3</sup>This is only for pre-existing items that were not installed under Contract.

#### CASS COUNTY HIGHWAY DEPARTMENT

#### SPECIAL PROVISION 15-1

January 1, 2015

#### SECTION 102.02 CONTRACTOR LICENSE

Section 102.02 of the <u>Standard Specifications for Road and Bridge Construction</u>, 2014 edition is deleted. All bidders must possess a current North Dakota Contractors License in accordance with § 43-07-12 of the North Dakota Century Code.

#### SECTION 104.06 CONTRACTOR CLAIMS

If the Contractor claims additional compensation for work or material not covered by the Contract, the Contractor is required to prosecute the claim in accordance with <u>Standard Specifications for Road and Bridge Construction</u>, 2014 edition, paragraph 104.06, <u>et seq</u>. The provisions of subparagraph 104.06 D are not applicable to this contract, nor are the provisions of North Dakota Century Code 24-02-26 <u>et seq</u>. as the North Dakota Department of Transportation is not a party to this contract.

References in the <u>Standard Specifications for Road and Bridge Construction</u>, 2014 edition, to the North Dakota Department of Transportation or Department must be construed as referring to the owner. Likewise, a reference by the same works to engineer or director must be construed as referring to the owner of the project.

#### **CONSTRUCTION NOTES**

#### WATER:

Water required to achieve the optimum moisture content will be considered incidental to the price bid for the stabilization process. Also, any water required for the roadway shaping of the existing aggregate and the additional Class 5 aggregate materials.

#### **EXISTING DRAIN TILE & CENTERLINE CULVERTS**

4" Drain Tile is located down the centerline of the roadbed at approximately 2' to 4' below the existing road on County Road 32 from State Highway 18 to County Road 11. There are also drain outlets that are perpendicular running into the ditch bottom approximately 1' above the ditch bottom. These outlets have rock around them. Care should be taken to not damage any existing drain tile or covering up any outlets and rock. If any drain tile or centerline culverts are damaged, they will be repaired at the expense of the contractor.

#### **ROADWAY RESHAPING:**

This item shall include all costs associated with the following items. Windrowing approximately 3" of existing aggregate to allow for the stabilization process, care to be taken not to salvage any existing gravel that has any subgrade material in it and laying the windrowed gravel back over the center 26' section in a uniform manner with the top having a 4% crown. In locations of soft spots the road centerline will require reshaping of centerline profile to provide a safe passage for the traveling public. No bluetops will be required for this work.

#### **TRAFFIC CONTROL:**

This item shall include all costs required to erect and maintain warning signs, and barricades on each termini of the project, work zone, and at all public road crossings as needed. The road will be closed; no official detour will be setup. Only local traffic to allow residents access to their property will be permitted. This item will also include all costs associated with flagging that is required to maintain a safe work zone. This item shall include two portable electronic programmable message boards at each end of the project to be installed one week prior to start of project. Once the project starts the message boards will not be needed and will rely on construction sign layout.

#### **PORTLAND CEMENT:**

This item shall include all costs associated Portland Cement required for this project. The estimated quantity is 6% by weight. Certifications will be required for this material. This item will be paid per the actual tons of material required by the mix design for necessary field changes to be approved by the engineer in the field.

#### **STABILAZATION:**

This item shall include all costs associated with stabilization of the center 1' X 26' of subgrade with Portland cement.

#### **CLASS 5 AGGREGATE:**

This item was calculated using 1200 Tons/mile. All field approaches and private drives are calculated at 12 Tons/approach. Section Lines are calculated at 24 Tons/approach.

#### **CONSTRUCTION NOTES**

#### **EQUIPMENT:**

The Road Reclaimer – The Contractor shall furnish a self-propelled machine designed to blend together the remaining in-place aggregate and subgrade. It shall be capable of uniformly blending the material to the depth of 12" or as directed by the Engineer. The width required to be stabilization is 26', therefore the machine would be required to make the necessary number of passes.

The control system shall be capable of fully automated operation, as well as manual operation, when injecting the liquids to be admixed. All functions shall be controlled from the operators' station including automatic nozzle cleaning, partial spray bar use, and on-the-fly changes to the quantities of material being added. Non contact flow meters shall be employed to measure liquid volumes and the control systems shall be proportional to the machines advance speed and shall be capable of maintaining accurate mixing regardless of changes in the machines working speed.

All pumps shall be separately controlled by the automatic system in the operators' cabin. During automatic operation, the system will allow liquids to be added only when the machine is in motion.

There shall be a system allowing the operator to verify that the nozzles on the spray bars are open and working from the operators' cabin.

The pump shall spray liquid into the mixing chamber through a single spray bar with sixteen spray nozzles. The nozzles shall be self-cleaning and the operator shall be able to switch off any number of individual nozzles, for working at reduced widths, from the control console in the operators cabin.

All reclaimed materials and aggregates shall be mixed properly to provide a homogenous material prior to injecting the stabilizing agent. The Reclaiming Machine shall be capable of injecting the stabilizing agent and automatically metering it with a variation of not more than plus or minus 0.2 percent by weight of the stabilizing agent. The unit shall be equipped with facilities so that the Contractor can verify and calibrate these items by a method acceptable to the Engineer.

The Reclaimer shall be equipped with a system capable of adding a binding agent with water for material compaction, from bulk tankers, directly into the mixing chamber.

The pump shall be a positive displacement, eccentric shaft style with a minimum capacity of 210 gallons per minute, and shall be resistant to damage from the contaminants in the water or stabilizing agent.

The drop spreader truck shall be capable of accurately placing the cement in a uniform manner per the mix design requirements.

#### **CONSTRUCTION NOTES**

#### **QUALITY CONTROL/QUALITY ASSURANCE:**

A third party testing lab will be required for QC/QA testing. A nuclear gauge will be required to check and verify moisture before and after the cement is added. This will insure that the optimum moisture and density per the mix design requirements. A mix design will be required for this project prior to construction. The contractor will determine the number of field samples needed to get a good representative of the existing field conditions. The mix design shall be submitted to the engineer for approval.

The contractor must have an individual on site at all times capable of making decisions and recommendations to the Engineer as field conditions change throughout the project to assure the best possible product.

#### **WEED CONTROL:**

Successful bidders as part of their supply contract will be required as part of the bid acceptance to comply with the following:

- All noxious weeds must be controlled within the pit and extraction area each year in compliance with North Dakota State Agriculture Department recommendations for noxious weed control.
- The county weed officer shall inspect the pit and extraction area before any
  materials shall be removed and shall by written letter certify operator's compliance
  with the North Dakota Department of Agriculture's recommendations for noxious
  weed control.
- 3. Any questions concerning the certifications of compliance for noxious weed control and the requirements thereunder are available from the County Weed Officer at (701) 298-2388.

This request is made pursuant to section 4.1-47 of the North Dakota Century Code.

"BID FOR SUE	BGRADE REPA	R", in Cass Co	ounty		
Proposal of:					

Mailing Address

to furnish and deliver all materials and to do and perform all work, in accordance with the Standard Specifications, adopted by North Dakota Department of Transportation October 2014, Standard Drawings currently in effect, and other contract provisions submitted herewith of the North Dakota Department of Transportation except as specifically stated otherwise in the "Special Provisions" contained therein, for the improvement of a certain Public Highway in Cass County, State of North Dakota, on which proposals will be received until 10:00 o'clock A.M., on the 26th day of March, 2015, this project being known as Cass County Project No. CH1513. Said project being situated as follows: Beginning at Cass County Road 32 from State Highway 18 to Cass County Highway 11 with the option of Cass Highway 32 from 1.5 miles west of State Highway 18 to 1 mile west, as indicated on the plans. Project being approximately 7.727 miles in length with an option to do an additional 1 mile, as indicated on the plans.

PROJECT NO: CH1513

**TYPE:** SUBGRADE REPAIR

LENGTH: 7.727 MILES WITH AN OPTION FOR AN ADDITIONAL 1 MILE

To The Chairman: Cass County Board of Commissioners Fargo, North Dakota

In accordance with the advertisement and notice to bidders from the Cass County Highway Department inviting proposals for the work on the project described above, the Bidder proposes to furnish all materials specified, and perform all work in the manner and at the time prescribed. The Bidder understands the quantities of work shown herein are approximate only, and are subject to increase or decrease. The bidder further understands that all quantities of work, whether increased or decreased, are to be performed at the unit prices proposed herein (except as otherwise provided in the contract documents).

The bid schedule, time for completion, other provisions, and bidder's affidavit follows:

#### **BID SCHEDULE FOR COUNTY PROJECT NUMBER CH1513**

BIDDER MUST TYPE OR NEATLY PRINT UNIT PRICES IN NUMERALS, MAKE EXTENSIONS FOR EACH ITEM, AND TOTAL, DO NOT CARRY UNIT PRICES FURTHER THAN THREE (3) DECIMAL PLACES.

Item No.	Spec No.	Description	Unit & Approx. Quant.	<u>Unit I</u> \$\$	<u>Price</u> 00	<u>Amo</u> \$\$	<u>ount</u> 00
001	103	CONTRACT BOND	LS 1				
002	107	RAILROAD PROTECTION INSURANCE	LS 1				
003	230	ROADWAY RESHAPING	MILE 7.727				
004	302	AGGREGATE SURFACE CL. 5	TON 9,196				
005	702	MOBILIZATION	LS 1				
006	704	TRAFFIC CONTROL	LS 1				
007	708	STABILIZATION	SY 117,863				
008	802	PORTLAND CEMENT	TON 3,819				
009	930	QC/QA TESTING	LS 1				

TOTAL:	\$

RECEIPT OF ADDENDUMS
NO. 1
NO. 2
NO. 3

#### C-32 AMENIA OPTION

#### **BID SCHEDULE FOR COUNTY PROJECT NUMBER CH1513**

BIDDER MUST TYPE OR NEATLY PRINT UNIT PRICES IN NUMERALS, MAKE EXTENSIONS FOR EACH ITEM, AND TOTAL, DO NOT CARRY UNIT PRICES FURTHER THAN THREE (3) DECIMAL PLACES.

Item No.	Spec No.	Description	Unit & Approx. Quant.	Unit F \$\$	Price 00	<u>Amo</u> \$\$	ount 00
001	103	CONTRACT BOND	LS 1				
002	230	ROADWAY RESHAPING	MILE 1.000				
003	702	MOBILIZATION	LS 1				
004	704	TRAFFIC CONTROL	LS 1				
005	708	STABILIZATION	SY 15,253				
006	802	PORTLAND CEMENT	TON 494				
007	930	QC/QA TESTING	LS 1				

			1				
		C32 AMENIA OPT	ION TOTAL	.: \$			
GRAND TOTAL: \$							
F	RECEIP	T OF ADDENDUMS					
•	NO 1						

NO. 2\_\_\_\_\_ NO. 3

**COUNTY PROJECT NUMBER: CH1513** 

**TYPE:** SUBGRADE REPAIR

#### TIME FOR COMPLETION:

The undersigned Bidder agrees, if awarded the contract, to prosecute the work with sufficient forces and equipment to complete the contract work within the allowable time specified as follows:

**WORKING DAY CONTRACT**: N/A working days, counted as provided in Standard Specification No. 108.06. Working days will be counted from N/A or from the actual date on which on-site work is started, whichever is earlier.

**COMPLETION DATE CONTRACT:** August 31, 2015 provided however, that a minimum of N/A working days, counted as provided in Standard Specification No. 108.06, are guaranteed for the performance of the work. Working days will be counted from N/A or from the actual date on which onsite work is started, whichever is earlier.

**COUNTY PROJECT NUMBER: CH1513** 

**TYPE: SUBGRADE REPAIR** 

#### **CONTRACT EXECUTION:**

The undersigned Bidder agrees, if awarded the contract, to execute the contract form and furnish a contract bond within ten days, as determined by NDCC Section 1-02-15, after date of notice of tentative award, in accordance with the provisions of Sections 103.05 and 103.06 of the Standard Specifications.

AFFIDAVIT:	
STATE OF	
COUNTY OF	)ss.
The undersigned bidder, being duly sworn representative	, does depose and say that he/she is an authorized
Of	
	, a
N	failing Address
Individual Partnership	Joint Venture Corporation
specifications and has checked the same that the said bidder or its agents, office,	and carefully prepared its bid from the plans and in detail before submitting said proposal or bid; and or employees have not, either directly or indirectly, I in any collusion, or otherwise taken any action in nection with this proposal or bid.
Bidder must sign on this line	Title
Type or Print Signature	Subscribed and sworn to before me this day
	County,State
	State
	Notary Public
	My commission expires